

THE LESSONS OF A PENTA-P RTD FasTracks

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Outline

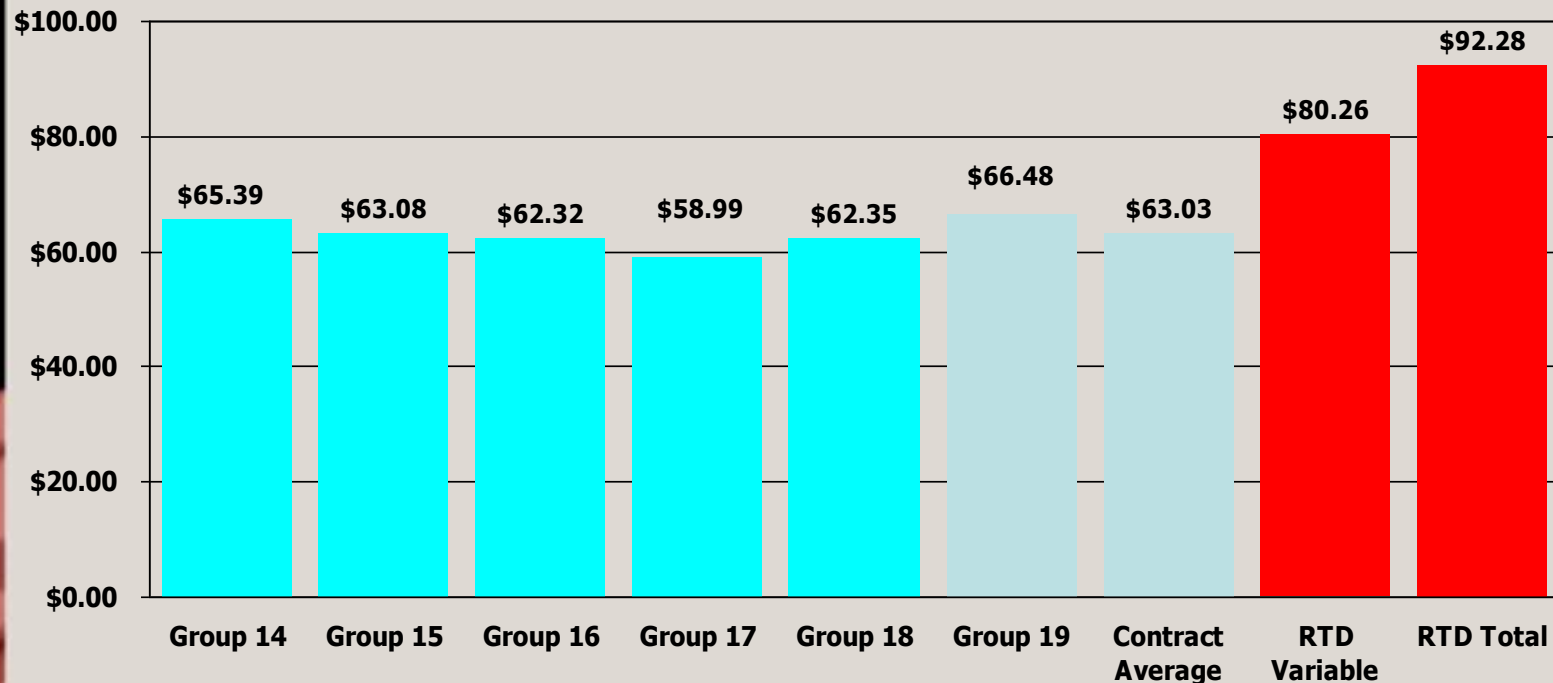
- Denver Regional Transportation District (RTD)
- Private Sector Experience
- RTD's FasTracks Program
- Case Study #1 - Denver Union Station –
- Case Study #2 - Eagle Project
- Penta-P
- Lessons Learned

The Regional Transportation District

- Created in 1969
- Eight county service area
 - 37 municipalities
- Service area: 2,410 square miles
- 2.5 million population
- 1,071 buses
- 83 light rail vehicles
- 175 routes
- 66 park-n-rides
- 10,366 bus stops
- 2,510 employees
- 35 miles of light rail
- 36 light rail stations
- 100 million+ annual boarding
- 8 operating & admin. facilities
- Total 2008 Operating Budget:
\$458 million



2007 Comparison of RTD and Private Contract Costs



1. Private contractors pay fuel tax, sales tax, property tax, and vehicle registration fees which RTD does not pay.
2. All RTD costs are unaudited estimates based on 2006 actual costs.
3. RTD total costs include all variable costs, fixed costs, and depreciation on operating facilities and support equipment.
4. RTD has statutory limitation on insurance liability. Private carriers do not have statutory limitation on insurance liability.

The T-REX Project

- Partnership between RTD, CDOT, FTA, FHWA
- \$1.67 billion design/build project
- On time, on budget
- 19 miles of new light rail
- 13 stations
- 17 miles of highway expansion
- Feeder bus system
- 6,000 parking spaces



The T-REX Project

•OPENING DAY:

➤ November 17, 2006

•SYSTEM RIDERSHIP:

➤ 70,000+ trips/day on
light rail system

➤ 14,000 trips more
than projected
ridership



RTD's FasTracks Program



RTD's FasTracks Plan

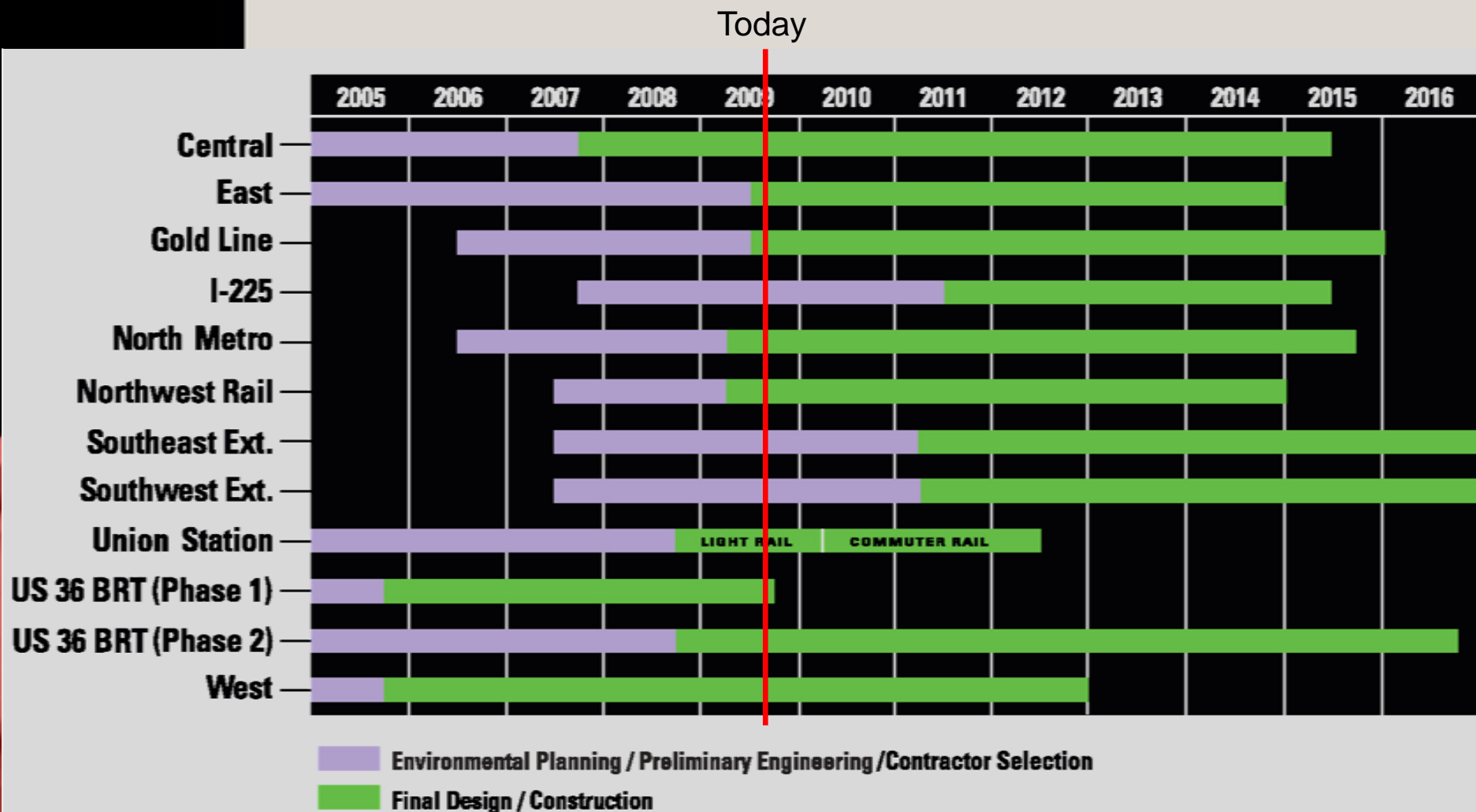
- 122 miles of new light rail and commuter rail
- 18 miles of Bus Rapid Transit (BRT)
- 31 new park-n-Rides with over 21,000 new spaces
- Enhanced Bus Network & Transit Hubs (FastConnects)
- Redevelopment of Denver Union Station



The FasTracks Program

- By 2001, RTD Board and local communities wanted a comprehensive, region-wide transit plan
- 100% RTD Board support
- Public vote in 2004 to fund the program
- 0.4% sales tax increase (\$.04 on \$10 purchase)
 - 0.6% was existing tax for base system
- Passed 58% to 42%
- Regional political support
 - All metro mayors unanimously supported FasTracks
 - Strong support from Denver Metro Chamber, industry, and business community

FasTracks schedule



FasTracks Challenges

- Schedule adherence
 - Many projects coming on line simultaneously
 - Integrated network requires close coordination
- Meeting budget
 - National pressures on commodity prices / declining sales tax revenues
 - “Normal” scope creep needs careful attention
- Resource availability
 - Labor – professional and unskilled
 - Materials

How P3s address these challenges

- Schedule adherence
 - PPPs are proven to deliver projects quickly
 - Single point of responsibility assures integration
- Meeting budget
 - Speed of delivery reduces overall costs
 - Performance specifications reduce likelihood of scope creep
- Resource availability
 - International interest in large projects increases resource pool for labor
 - Large consortia have greater “pull” to obtain materials

RTD is using a number of P3s



Construction Management/
General Contractor



Design-Build-Finance-
Operate-Maintain



Design-Build



Master Developer



Design-Build

Case Study # 1 – Denver Union Station

The Public-Private Partnership

- Regional Transportation District (RTD)
- City & County of Denver (CCD)
- Colorado Department of Transportation (CDOT)
- Denver Regional Council of Governments (DRCOG)
- **Union Station Neighborhood Company (USNC)**



Master Developer Selection Process

- 18 month selection process
- National significance and representation
- Developer RFQ in June of 2005
- Developer RFP Part I, February 2006
- Developer RFP Part II, July 2006
- Developer Interviews, August 2006
- Developer Selection, USNC November 2006



Integrated Transit Neighborhood



Master Developer approach



- Leverage Value of Real Estate to Help Fund Transit
- Ensure Efficient Integration of Transit, Development, and Public Space
- Simultaneously Address Transit Oriented Development and Transit Function Opportunities

Case study #2 – Eagle Project



Eagle Project – Total Scope

• Design-Build

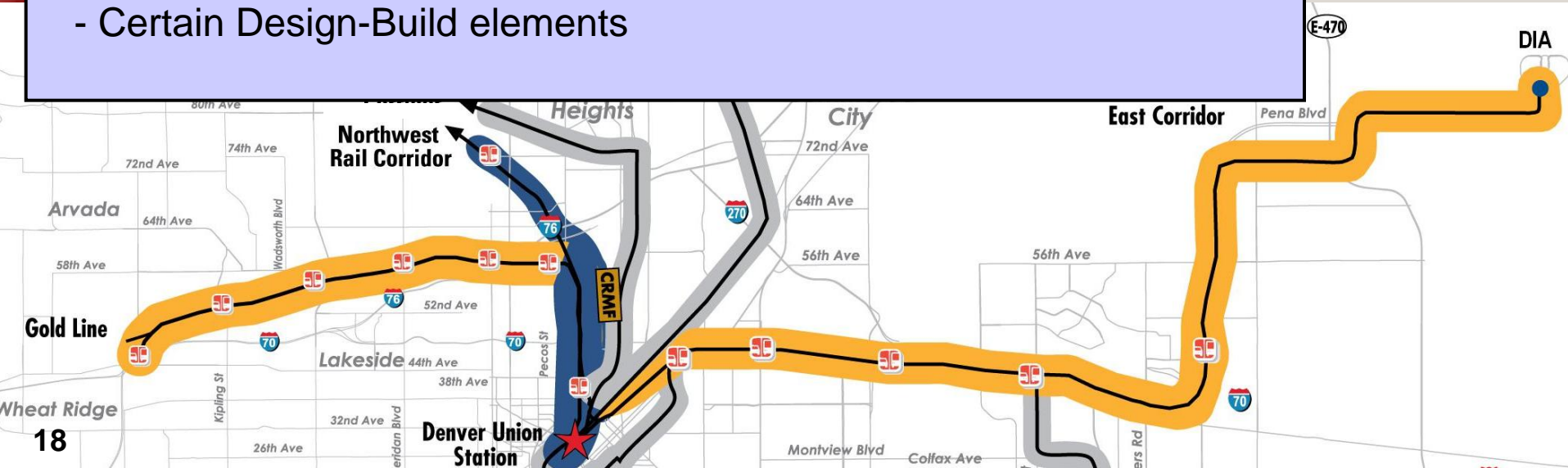
- East Corridor and Gold Line
- Commuter Rail Maintenance Facility
- Northwest Rail electrified section (DUS – South Westminster)
- DUS systems (power, signals, etc.)
- Commuter rail cars including options

• Operate & Maintain

- East and Gold Line corridors and NWR electrified section
- All commuter rail cars

• Finance

- Certain Design-Build elements



Eagle Project – Federal Penta-P Project Elements

Scope elements agreed upon with FTA at Entry to PE

- East (DUS throat to end-of-line)
- Gold Line (Pecos to end-of-line)
- Electrification and stations for Northwest Rail shared section (DUS - Pecos)
- Commuter Rail Maintenance Facility
- Commuter rail cars for East and Gold Line only



SAFETEA-LU Reauthorization Challenge

Uncertainty of the Reauthorization timing presents a fundamental challenge:

- Notice to Proceed for the entire scope of the Eagle Project can not be awarded until a Full Funding Grant Agreement (FFGA) is signed or other sufficient funds are secured – timing is uncertain
- RTD needs to proceed with procurement to keep Concessionaire teams engaged

Resolution:

- Implement a two-phased procurement approach

Why Phasing is Necessary

- Chairman of the House Committee on Transportation and Infrastructure has been focused on passage of a new transportation funding bill prior to the expiration of the current bill (September 30, 2009)
- In June of this year, the Senate, with the support of the Obama Administration, began drafting legislation for an 18-month extension to SAFETEA-LU
- Without a new transportation funding bill, it is unlikely that FTA will be able to award an FFGA for the Eagle Project
- A phased approach allows RTD to continue moving the Eagle Project forward, even though the timing of the FFGA is uncertain
- FTA is supportive of exploring the potential to award the Eagle Project an Early Systems Work Agreement (ESWA) early next year

Phasing of the Work

- Phase 1
 - East Corridor
 - Maintenance facility including the control center and the lead track from DUS
 - Vehicles
 - Stations and park-n-Rides on East Corridor
- Phase 2
 - Gold Line
 - Northwest Rail Electrified Section
 - Stations and park-n-Rides on Phase 2 alignments

Status of Eagle Project

- **Procurement:**

- Three teams prequalified in November, 2008 through RFQ process
- Draft RFP for industry review released in December, 2008
- Final RFP to be issued in late September, 2009
- Final proposals to be submitted with fixed price and financing in March, 2010
- Financial close and Phase 1 notice to proceed in mid-2010
- Phase 2 notice to proceed 2011, contingent on FFGA

- **FTA New Starts Process:**

- Applied for Entry Into PE in September, 2008
- Received Entry to PE in April, 2009
- Submitted New Starts/Final Design application in August/September, 2009
- Objective is to secure an ESWA in early-2010; FFGA in 2011

Concessionaire teams

- Denver Transit Partners
- Mile High Transit
- Mountain-Air Transit Partners

Teams consist of:

- Equity investors/ infrastructure funds
- Financial firms
- Operators and maintainers
- Rolling stock manufacturers
- Construction contractors
- Engineering firms

Contract basics

- **Single Concession Agreement**
 - Concession period will be ~46 years
 - Design / Build period plus 40 years O&M
 - Underlying lease of real property and improvements
 - RTD owns all assets at all times
 - Financing from concessionaire
 - Proposers committing to a service payment adjusted over time covering cost of design-build and O&M
- **Powerful incentives for budget and schedule adherence**

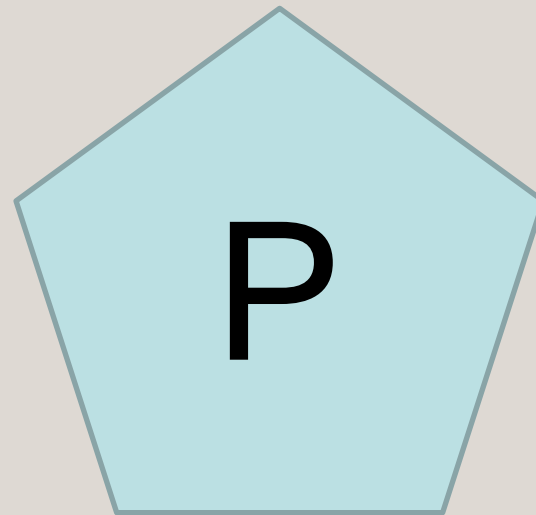
Risk Allocation Identified in Draft RFP

RTD Risk	Concessionaire Risk
<ul style="list-style-type: none"> • Timeliness of third party design reviews • RTD requested changes to project requirements • Delay in gaining access to the site • Unforeseen archaeological risks • Errors/omissions in environmental reports • Unidentified and dry utilities • RTD permits • Discriminatory legislative changes • Ridership and fare evasion risk 	<ul style="list-style-type: none"> • Design fails to meet the specified requirements • Design delays • Construction delays • Cost overruns • Additional land requirements • Compliance with environmental requirements • Geological obstructions • Safety and security • Accuracy of reference data • Concessionaire permits • Concessionaire or subcontractor default • Final completion delays • Third party claims • Security during the construction period • Repairs or maintenance work affecting availability • Failure to meet operating performance standards • Operation and maintenance costs • Condition of system at the end of concession period • Wet utilities • Compliance with railroad agreements
Shared Risk	
<ul style="list-style-type: none"> • Third party design reviews – disputes • Non-discriminatory legislative change • Force majeure 	

Adjustments to Service Payments

- **Payments made monthly and adjusted for availability and performance**
 - Provision of required service
 - On-time performance of trains
 - Station availability
 - Quality and timely maintenance
- **Payment adjustments are approximately:**
 - Increase of up to 0.5% for perfect delivery
 - Reduced by up to 25% for inferior delivery

FTA Public Private Partnership Pilot Program (Penta-P)



How Eagle Project Supports the Goals of the Penta-P Program

Penta-P Goals	Eagle Project Approach
Reduce risk by sharing responsibility among partners	Allocate to the party that can most cost-effectively manage the risk
Save time by using a non-traditional design-build approach and through a streamlined New Starts process	Maximize opportunities to streamline the New Starts process under the Penta-P program, including combining project development submittals and working with FTA on the limitation of certain risk assessments. Limited payment using FTA funds until design-build efforts are completed, which provides powerful incentive to deliver on schedule
Save money through tighter integration of design, engineering, construction and operations	Incorporate feedback from industry review through draft RFP process, which allows early identification of major cost concerns. Assure life-cycle cost certainty through the 40 + year term of agreement
Deliver high quality project by involving contractor early in project development and identifying opportunities for innovation early	Incorporate early industry feedback and provide performance specifications (not detailed technical specifications) to concessionaires. Include points for innovative ideas in RFP evaluation criteria

Challenges facing a P3 in the New Starts environment

- **Performance Certainty/ Scope Flexibility**
 - FFGA normally based on defined scope
 - P3 leverages performance criteria to facilitate innovation – scope may vary somewhat between proposals
- **Timing of FFGA award**
 - Phasing approach allows private financing to be committed early; but
 - Phase 2 NTP dependent on timing of FFGA requiring Concessionaires and RTD to address additional uncertainty and risk

Challenges facing a P3 in the New Starts environment – cont'd

- **FFGA Payments**

- FFGA normally a reimbursement program
- In a privately financed P3 payments made after start of operations
- Contractor expenditures need to be considered local match for grant payments

- **Bid Bonding Requirements**

- FTA circular 4220 anticipates a bid bond of 5%
- For large P3 this can equate to \$100 million
- Proposer costs high >\$20 million
- Powerful incentive to stay at the table with small bid bond to cover agency costs

Lessons Learned



Lessons learned on Eagle Project

- **Develop a plan and stick to it**
 - Define scope of work
 - Define approach – acquisition plan
 - Define schedule
- **Be prepared but flexible!**
 - Development and procurement process takes time, things will change
 - Make sure key objectives are not compromised without full disclosure, agreement and understanding

Lessons learned on Eagle Project

- **Risk transfer comes at a cost**
 - Allocating the risks to the right party is good for all
 - If a risk cannot be managed the agency should be responsible
 - Share when appropriate
- **Third P is critical**
 - Think of the project as a long term relationship
 - Success comes from working together

Lessons learned on Eagle Project

- **Communicate**
 - There is no single way to prepare and implement a P3
 - Learn from your organization and advisors
 - Learn from future partners
 - FTA
 - Concessionaires
 - Local Governments

Lessons learned as part of Penta-P

- **FTA's New Starts assessment process did not anticipate P3 procurements**
 - Certain submittals need adjustment, e.g.
 - Project management plan
 - Fleet management plan
 - Sequential approval for PE, final design and FFGA inconsistent with P3 approach
 - Detailed definition of scope of work inconsistent with flexibility of P3 approach
 - Approval time and uncertainty for FFGA inconsistent with financing needs
 - Reimbursement nature of FFGA not ideal for privately financed P3

Lessons learned as part of Penta-P

- **FTA streamlining of approvals has been beneficial**
- **Potential to combine FTA project development stages (FD/FFGA) can accelerate development phase and save money; however, difficult to achieve given reauthorization timing and process constraints**
- **Discounting private at-risk equity protects public interest while facilitating more projects**

FTA approach

- **FTA staff has been thoughtful and proactive in examining new ways of doing business**
 - **New Starts and Penta-P team integration**
- **RTD looks forward to a successful partnership not only with the Eagle Concessionaire but with FTA**

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